FIG. 1

SYSTEM CONFIGURATION
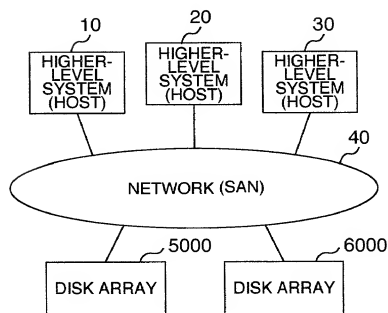

FIG. 3

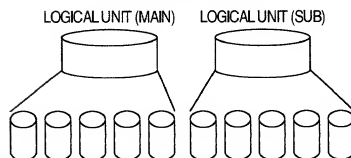DISK DEVICE GROUP

FIG. 2

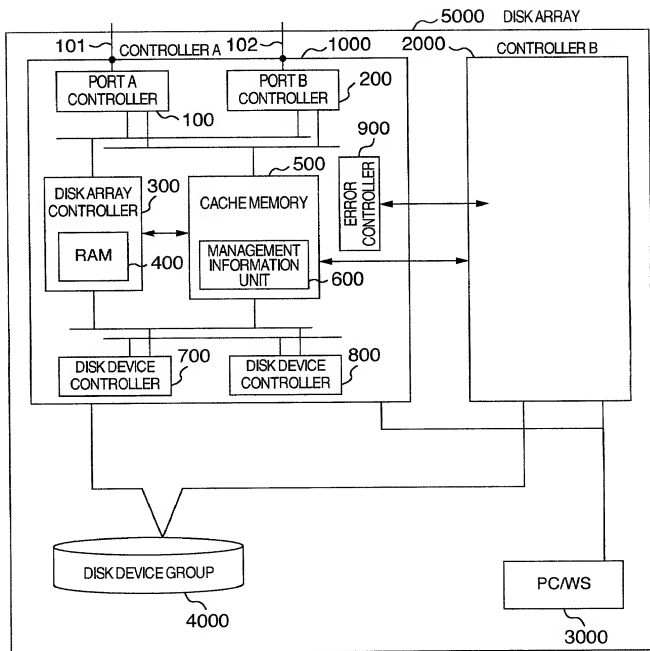DISK ARRAY CONTROLLER

FIG. 4

INTERFACE INFORMATION BETWEEN PORT CONTROLLER
AND DISK CONTROLLER (IN RAM)

400
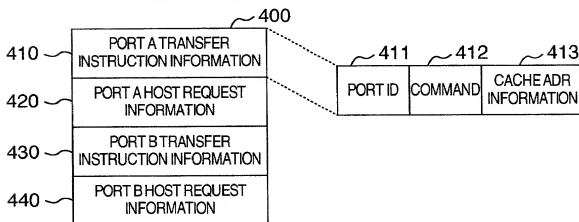
410	PORT A TRANSFER INSTRUCTION INFORMATION
420	PORT A HOST REQUEST INFORMATION
430	PORT B TRANSFER INSTRUCTION INFORMATION
440	PORT B HOST REQUEST INFORMATION

411   412   413

PORT ID	COMMAND	CACHE ADR INFORMATION

FIG. 5

PORT LOAD INFORMATION (IN RAM)

450	PORT A LOAD INFORMATION
460	PORT B LOAD INFORMATION

NUMBER OF I/O OPERATIONS	451
TRANSFER AMOUNT	452
ACCESS INFORMATION	453
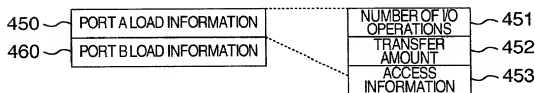
FIG. 6

FIG. 6

CONTROLLER LOAD INFORMATION (IN CACHE)

610	CONTROLLER A LOAD INFORMATION
620	CONTROLLER B LOAD INFORMATION

NUMBER OF I/O OPERATIONS	611
TRANSFER AMOUNT	612
ACCESS INFORMATION	613
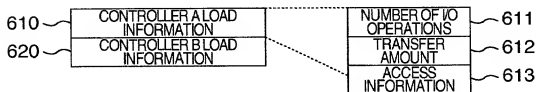
FIG. 7

BACKUP PROGRESS INFORMATION (IN CACHE)

630	BACKUP PROGRESS INFORMATION

TARGET LU NUMBER	631
BACKUP EXECUTION POINTER	632
COPY POINTER	633
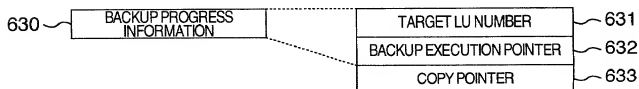
FIG. 8

USER SPECIFIED PORT INFORMATION (IN CACHE)
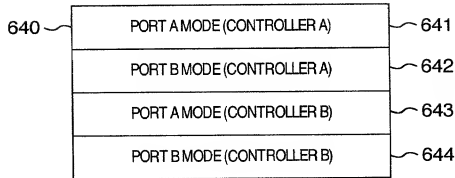
640 —	PORT A MODE (CONTROLLER A) — 641
	PORT B MODE (CONTROLLER A) — 642
	PORT A MODE (CONTROLLER B) — 643
	PORT B MODE (CONTROLLER B) — 644

FIG. 9

COPY/BACKUP TIMING INSTRUCTION INFORMATION (IN CACHE)

650 — COPY/BACKUP TIMING INSTRUCTION INFORMATION

FIG. 10

TIME SUPERVISION INSTRUCTION INFORMATION (IN CACHE)
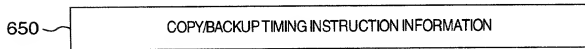
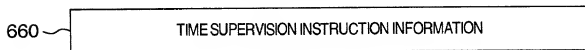660 — TIME SUPERVISION INSTRUCTION INFORMATION
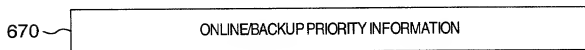
FIG. 11

PRIORITY INFORMATION (IN CACHE)

670 — ONLINE/BACKUP PRIORITY INFORMATION
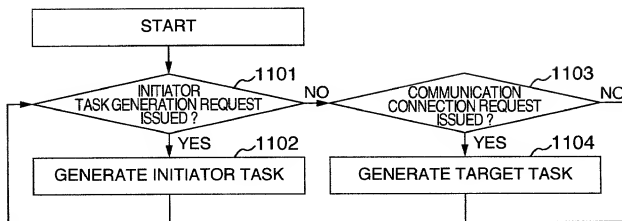
FIG. 12

```
                    START
```

| 1101 INITIATOR TASK GENERATION REQUEST ISSUED? | NO → | 1103 COMMUNICATION CONNECTION REQUEST ISSUED? | NO |

↓ YES 1102

GENERATE INITIATOR TASK

↓ YES 1104

GENERATE TARGET TASK

FIG. 13

START

↓

ISSUE LOGIN TO TARGET ~1201

↓

TRANSFER DATA ~1202

↓

ISSUE LOGOUT TO TARGET ~1203

↓

END

FIG. 14

START

↓

AUTHENTICATE LOGIN REQUEST ~1301

↓

TRANSFER DATA ~1302

↓

AUTHENTICATE LOGOUT ~1303

↓

END